Teaching NeuroImages: Corpus callosum splenium hyperintensity in fragile X–associated tremor ataxia syndrome

Dimitri Renard, MD
Genevieve Fourcade, MD
Giovanni Castelnovo,
MD

Correspondence to
Dr. Renard:
dimitrirenard@hotmail.com

Figure Brain MRI (FLAIR sequences) of both patients

Fluid-attenuated inversion recovery (FLAIR) imaging (patient 1, A and B; patient 2, C and D) shows hyperintensities in the inferior part of the splenium of the corpus callosum (A and C) and in the middle cerebellar peduncle bilaterally (B and D), associated with a traumatic subdural hematoma (due to ataxia-related fall) in patient 2.

We present 2 patients with genetically proven symptomatic fragile X-associated tremor ataxia syndrome (FXTAS), one 62-year-old man with progressive action tremor and one 74-year-old man with progressive ataxia, showing typical middle cerebellar peduncle hyperintensities on MRI fluid-attenuated inversion recovery sequences associated with a hyperintensity of the inferior part of the splenium of the corpus callosum (figure). Splenial hyperintensity has been reported as frequently encountered and proposed as an additional radiologic diagnostic criterion in FXTAS.^{1,2}

AUTHOR CONTRIBUTIONS

Dimitri Renard: drafting/revising the manuscript, study concept or design, analysis or interpretation of data. Genevieve Fourcade: study

concept or design, analysis or interpretation of data. Giovanni Castelnovo: study concept or design, analysis or interpretation of data.

STUDY FUNDING

No targeted funding reported.

DISCLOSURE

The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

REFERENCES

1. Renaud M, Perriard J, Coudray S, et al. Relevance of corpus callosum splenium versus middle cerebellar peduncle hyperintensity for FXTAS diagnosis in clinical practice. *J Neurol* 2015;262:435–442.
2. Apartis E, Blancher A, Meissner WG, et al. FXTAS: new insights and the need for revised diagnostic criteria. *Neurology* 2012;79:1898–1907.

Neurology®

Teaching *NeuroImages*: Corpus callosum splenium hyperintensity in fragile X–associated tremor ataxia syndrome

Dimitri Renard, Genevieve Fourcade and Giovanni Castelnovo

Neurology 2015;84:e194

DOI 10.1212/WNL.0000000000001652

This information is current as of June 1, 2015

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/84/22/e194.full
Supplementary Material	Supplementary material can be found at: http://n.neurology.org/content/suppl/2015/05/30/WNL.0000000000001652.DC1
References	This article cites 2 articles, 1 of which you can access for free at: http://n.neurology.org/content/84/22/e194.full#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): All Movement Disorders http://n.neurology.org/cgi/collection/all_movement_disorders MRI http://n.neurology.org/cgi/collection/mri Tremor http://n.neurology.org/cgi/collection/tremor
Permissions & Licensing	Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: http://www.neurology.org/about/about_the_journal#permissions
Reprints	Information about ordering reprints can be found online: http://n.neurology.org/subscribers/advertise

Neurology® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright © 2015 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.